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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,124	07/07/2003	Hiroshi Daiku	100021-00127	8185

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EXAMINER	
HERNANDEZ, NELSON D	

ART UNIT	PAPER NUMBER
2622	

MAIL DATE	DELIVERY MODE
07/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/613,124	DAIKU ET AL.	
	Examiner	Art Unit	
	Nelson D. Hernandez	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 April 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4 and 5* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4 and 5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The Examiner acknowledges the amended claims filed on April 19, 2007. **Claims 1 and 4** have been amended. **Claims 2 and 6** have been canceled.

Response to Arguments

2. Applicant's arguments, see page 5, filed April 19, 2007, with respect to the rejections of **claims 1 and 4** under 35 USC § 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made in view of newly found prior art.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 2, 4, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baharav et al., US Patent 6,989,862 B1 in view of Aruga et al., US Patent 6,429,896 B1.

Regarding claim 1, Baharav et al. discloses a resolution conversion method (Figs. 3 and 6) for converting color data output from a single-plate-type color-image

sensor (Image capturing unit 102 as shown in figs. 1 and 5) into data of a predetermined resolution (Col. 2, lines 22 – col. 3, line 23; col. 3, line 60 – col. 5, line 65) and at the same time, processing the color data so that the pixel positions of respective colors coincide with each other (Col. 2, lines 22 – col. 3, line 23; col. 3, line 60 – col. 5, line 65), wherein resolution conversion processing that converts the data of each pixel into data of the predetermined resolution and simultaneous processing that processes the color data so that the pixel positions of respective colors coincide with each other are performed simultaneously in a circuit (Fig. 1: 104; col. 2, lines 22 – col. 3, line 23; col. 3, line 60 – col. 6, line 39; col. 7, line 36 – col. 8, line 21).

Baharav et al. does not explicitly disclose that plural processes to convert the color data into different resolutions are stored in advance and some of the plural processes are selected and executed according to an external direction.

However, Aruga et al. discloses a method of changing the resolution of a captured image in a digital camera (CA as shown in figs. 2 and 3), herein said digital camera comprises a ROM (16 as shown in fig. 3) having instructions stored in advance, to convert the color data into different resolutions and wherein said instructions to change the resolution of the image data are selected and executed according to an external direction (external storage device OM as shown in figs. 1-3) (Col. 1, lines 45-62; col. 3, line 26 – col. 4, line 41; col. 7, lines 21-38).

Therefore, taking the combined teaching of Baharav et al. in view of Aruga et al. as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Baharav et al. to have plural processes to convert the

color data into different resolutions are stored in advance and some of the plural processes are selected and executed according to an external direction. The motivation to do so would have been to improve the operation of a digital camera by allowing the user have the option of changing the resolution of the camera with the purpose of either save space in memory or obtain high quality pictures and also to reduce the number of parts of the digital camera since the functions of the camera are selected from an external apparatus.

Regarding claim 2, Baharav et al. discloses that the resolution conversion processing and the simultaneous processing perform weighting operations on the color data of pixels including each pixel and neighboring pixels adjacent to said each pixel (Col. 1, lines 23-62; col. 5, lines 22-57 col. 6, lines 40-67).

Regarding claim 4, Baharav et al. discloses a pixel data processing circuit (Figs. 1 and 5) comprising a resolution conversion/simultaneous processing circuit (104 as shown in figs. 1 and 5) that converts color data output from a single-plate-type color-image sensor (Image capturing unit 102 as shown in figs. 1 and 5) into data of a predetermined resolution and, at the same time, that processes the color data so that the pixel positions of respective colors coincide with each other (Col. 2, lines 22 – col. 3, line 23; col. 3, line 60 – col. 5, line 65), wherein the resolution conversion/simultaneous processing circuit performs simultaneously the resolution conversion processing that converts the data of each pixel into data of the predetermined resolution and the simultaneous processing that processes so that the pixel positions of respective colors

coincide with each other (Fig. 1: 104; col. 2, lines 22 – col. 3, line 23; col. 3, line 60 – col. 6, line 39; col. 7, line 36 – col. 8, line 21).

Baharav et al. does not explicitly disclose that said predetermined resolution is directed from the outside and that the resolution conversion/simultaneous processing circuit stores plural processes to convert the color data into different resolutions and selects and executes some of the plural processes according to a direction from the outside.

However, Aruga et al. discloses a method of changing the resolution of a captured image in a digital camera (CA as shown in figs. 2 and 3), herein said digital camera comprises a ROM (16 as shown in fig. 3) having instructions stored in advance, to convert the color data into different resolutions and wherein said instructions to change the resolution of the image data are selected and executed according to an external direction (external storage device OM as shown in figs. 1-3) (Col. 1, lines 45-62; col. 3, line 26 – col. 4, line 41; col. 7, lines 21-38).

Therefore, taking the combined teaching of Baharav et al. in view of Aruga et al. as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Baharav et al. to have the predetermined resolution is directed from the outside and that the resolution conversion/simultaneous processing circuit stores plural processes to convert the color data into different resolutions and selects and executes some of the plural processes according to a direction from the outside. The motivation to do so would have been to improve the operation of a digital camera by allowing the user have the option of changing the resolution of the camera

with the purpose of either save space in memory or obtain high quality pictures and also to reduce the number of parts of the digital camera since the functions of the camera are selected from an external apparatus.

Regarding claim 5, limitations can be found in claim 4.

Conclusion

5. Because new Grounds of Rejections have been made to unamended claims, THIS ACTION IS MADE NON-FINAL.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson D. Hernandez whose telephone number is (571) 272-7311. The examiner can normally be reached on 9:30 A.M. to 6:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571) 272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nelson D. Hernandez
Examiner
Art Unit 2622

NDHH
July 6, 2007

LIN YE
SPE. ART UNIT 2622